SEQUENCE LISTING

<110> SmithKline Beecham Biologicals S.A.

<120> Novel compounds

<130> BM45394

<160> 6

<170> FastSEQ for Windows Version 3.0

<210> 1
<211> 969
<212> DNA
<213> *Moraxella catarrhalis*

<400> 1

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caggttatca cggacagtca gggcgtacca aatcgctatc aggtgaagca gggcgatact     240
gtcagtaaga ttgctcagcg ttatggatta aattggcgtg agattggaca cattaataat     300
ctaaatagca gttatacgat ttatacaggt caatggctga ctttatggtc aggtgatctc     360
aaggtgcgtg agcgtagtat cagctctggt gtgaatacag ctcacacacc ttcgcctgtg     420
gcggttcagt caagcagacc accagtacag cagcatcctg ccgtacaaaa acccacgcca     480
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<210> 2
<211> 322

<212> PRT

<213> *Moraxella catarrhalis*

<400> 2

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Arg Leu Gly Leu Ile Phe Gly Val Ile Thr Thr Cys Ile Leu Ala Gly
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Cys Ala Ser Lys Pro Thr Tyr Asn Ser Thr Ser Gly Ser Gly Ser His
            35              40              45
Arg Thr Ser Gly Ser Gly Gly Leu Ala Ile Gly Ser Gln Val Ile Thr
            50              55              60
Asp Ser Gln Gly Val Pro Asn Arg Tyr Gln Val Lys Gln Gly Asp Thr
65              70              75              80
Val Ser Lys Ile Ala Gln Arg Tyr Gly Leu Asn Trp Arg Glu Ile Gly
            85              90              95
His Ile Asn Asn Leu Asn Ser Ser Tyr Thr Ile Tyr Thr Gly Gln Trp
            100             105             110
Leu Thr Leu Trp Ser Gly Asp Leu Lys Val Arg Glu Arg Ser Ile Ser
            115             120             125
Ser Gly Val Asn Thr Ala His Thr Pro Ser Pro Val Ala Val Gln Ser
            130             135             140
Ser Arg Pro Pro Val Gln Gln His Pro Ala Val Gln Lys Pro Thr Pro
145             150             155             160
Pro Val Val Val Val Lys Lys Pro Thr Pro Thr Pro Pro Val Val Gln
            165             170             175
Gln Pro Ala Pro Val Ala Pro Pro Val Thr Glu Ala Pro Phe Ala Thr
            180             185             190
Gly Ser Ser Gly Val Met Gln Phe Arg Tyr Pro Val Gly Ala Thr Asn
            195             200             205
Pro Val Val Arg Arg Phe Gly Thr Ala Thr Val Ala Gly Ser Thr Val
            210             215             220
Thr Ser Asn Gly Met Trp Phe Ser Gly Arg Asp Gly Asp Leu Ile Asn
225             230             235             240
Ala Ser Asn Ala Gly Thr Val Ile Gln Ala Asp His Asn Met Asp Gly
            245             250             255
Ala Ser Ile Val Ile Gln His Thr Asn Gly Phe Val Ser Ser Tyr Ile
            260             265             270
His Ile Lys Asp Ala Gln Val Lys Thr Gly Asp Thr Val Arg Thr Gly
            275             280             285
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Gln Arg Ile Ala Ser Met Lys Asn Gln Pro Ser Gly Ala Ala Leu Phe
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Glu Phe Arg Ile Ser Arg Asn Gly Val Tyr Val Asp Pro Leu Thr Val
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Leu Lys

        <210> 3
        <211> 966
        <212> DNA
        <213> Moraxella catarrhalis

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agtacctcag gttcgggcag tcatcgtact tcaggttcag gtggtttggc aataggttca   180
caggttatca cggacagtca gggcgtacca aatcgctatc aggtgaagca gggcgatact   240
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ctaaatagcg gttatacgat ttatacaggt caatggctga ctttatggtc aggtgatctc   360
aaggtgcgtg agcgtagtat cagctctggt gtgaatacag ctcacacacc ttcgcctgtg   420
gcggttcagt caagcagacc accagtacag cagcatcctg ccgtacaaaa acccacgcca   480
cctgttgttg tggtaaaaaa acccacaccg actccgcctg tggttcagca gccagcacca   540
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gccagtaatg caggcacagt cattcaagct gatcacaata tggacggggc gagtattgtg   780
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acaggcgata cggtgcgtac cggtcagcgt attgcaagca tgaaaaatca gccaagcggt   900
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        <210> 4
        <211> 322
        <212> PRT
        <213> Moraxella catarrhalis

        <400> 4
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1   5   10   15
Arg Leu Gly Leu Ile Phe Gly Val Ile Thr Thr Cys Ile Leu Ala Gly

3

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                20                      25                      30
    Cys Ala Ser Lys Pro Thr Tyr Asn Ser Thr Ser Gly Ser Gly Ser His
            35                      40                      45
    Arg Thr Ser Gly Ser Gly Gly Leu Ala Ile Gly Ser Gln Val Ile Thr
            50                      55                      60
    Asp Ser Gln Gly Val Pro Asn Arg Tyr Gln Val Lys Gln Gly Asp Thr
    65                      70                      75                      80
    Val Ser Lys Ile Ala Gln Arg Tyr Gly Leu Asn Trp Arg Glu Ile Gly
                85                      90                      95
    His Ile Asn Asn Leu Asn Ser Gly Tyr Thr Ile Tyr Thr Gly Gln Trp
                100                     105                     110
    Leu Thr Leu Trp Ser Gly Asp Leu Lys Val Arg Glu Arg Ser Ile Ser
            115                     120                     125
    Ser Gly Val Asn Thr Ala His Thr Pro Ser Pro Val Ala Val Gln Ser
            130                     135                     140
    Ser Arg Pro Pro Val Gln Gln His Pro Ala Val Gln Lys Pro Thr Pro
    145                     150                     155                     160
    Pro Val Val Val Val Lys Lys Pro Thr Pro Thr Pro Pro Val Val Gln
                165                     170                     175
    Gln Pro Ala Pro Val Ala Pro Pro Val Thr Glu Ala Pro Phe Ala Thr
                180                     185                     190
    Gly Ser Ser Gly Val Met Gln Phe Arg Tyr Pro Val Gly Ala Thr Asn
            195                     200                     205
    Pro Val Val Arg Arg Phe Gly Thr Ala Thr Val Ala Gly Ser Thr Val
            210                     215                     220
    Thr Ser Asn Gly Met Trp Phe Ser Gly Arg Asp Gly Asp Leu Ile Asn
    225                     230                     235                     240
    Ala Ser Asn Ala Gly Thr Val Ile Gln Ala Asp His Asn Met Asp Gly
                245                     250                     255
    Ala Ser Ile Val Ile Gln His Thr Asn Gly Phe Val Ser Ser Tyr Ile
                260                     265                     270
    His Ile Lys Asp Ala Gln Val Lys Thr Gly Asp Thr Val Arg Thr Gly
            275                     280                     285
    Gln Arg Ile Ala Ser Met Lys Asn Gln Pro Ser Gly Ala Ala Leu Phe
            290                     295                     300
    Glu Phe Arg Ile Ser Arg Asn Gly Val Tyr Val Asp Pro Leu Thr Val
    305                     310                     315                     320
    Leu Lys
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<210> 5

<211> 35

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 5

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<210> 6

<211> 42

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 6

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